

100' from Greenwich, the material for a common waggon does not grow on the continent, and we are fast exhausting it east of that meridian. Ohio and Indiana, Kentucky and Missouri, have girdled and burned hard wood trees that would to-day be worth hundreds of millions of dollars. If failing springs and protracted drouths and extremes of temperature suggest replanting, their people may safely rely on a future market more certain than that of any other product of the soil.

The remedies were embodied in the following resolutions:

1. *Resolved*, That we recommend farmers throughout the United States to plant with trees their hilly or other waste lands, and at least ten per cent. of their farms with trees, in such a manner as to provide shelter belts of clumps and rapid growing and useful timber.

2. *Resolved*, That we solicit the Legislature of the several States to pass laws providing bounties for planting useful trees, encouraging the planting of highway, and for the provision of State nurseries of young timber trees, and also the appointment of an Arbor Day for the annual planting of trees, as has already been done in the State of Nebraska.

3. *Resolved*, That we ask our Congress of the United States to require, so far as practicable, that hereafter railroad companies and settlers receiving the benefit of the homestead and other acts donating lands, shall plant with timber trees one-tenth of the lands so donated.

Care of Machines and Implements.

Agricultural machines and implements cost a great deal of money, and they ought to be well taken care of, so as to preserve them in working order as long as possible. Threshing machines, reapers and mowers, seed drills, etc., generally suffer more damage from exposure to the weather when idle, than from the wear and tear occasioned by the work which they perform. There should be an implement house on every farm, large enough to contain all the machines and implements. There should also be a tool house for small tools. Every machine, implement, and tool, when not at work, should be in its proper place in the house or shed, painted and repaired, and safe from damage of every kind. When managed in this way, machines and implements will last at least twice as long as they would if left lying around loose, the iron work gathering rust from rain and dew, and the wood work rotting from the effect of wet and damp, or shrinking and cracking in the sun. A well stocked tool house is a good indication of the intelligence and orderly habits of its owner.

It is said that more than \$5,000,000 is lost every year by the farmers of the United

States by damage done to machines, implements, and tools, from exposure to the weather at times when they ought to be carefully housed. The farmer who complains of the high price of machines should make them last as long as possible by protecting them from the rays of the sun in summer, and from rain, frost, and snow at other seasons. It has been proved that even a grindstone becomes damaged by exposure to the weather; it is not to be wondered at, then, that machines and implements made of wood and iron should be easily damaged by rain, etc. A thrifty farmer understands that a dollar saved is just as good as a dollar earned or gained in any way.—*Western Rural World*.

A New Enemy to the Corn Plant.

We notice that in many places, this season, that the corn plant is attacked by a minute insect, very similar to what gardeners who have graperies call the "thrip." It is so small that it can only be seen distinctly by a pocket lens, when it appears as a small whitish-brown thread, about a line in length. It is however, very active. When disturbed, it jumps like the cabbage-flea. It feeds on the green matter of the leaves, usually eating in straight lines up and down between the ribs, leaving an appearance of delicate thread-lines where they have fed. That they are a serious injury is evident from the fact that the corn so attacked is not so thrifty and vigorous as that free from the visitations of the insect. Indeed, as the effect is to prevent the use of half the leaf-surface to the plant, it must be an injury. It is the same as plucking off half the leaves, the consequence of which we all know very well. Whether it has come to stay, or is only a casual visitor, remains to be seen.—*German-town Telegraph*.

Effects of Forests on Climate.

The following observations, (from the *London Garden*) while they may not establish the effects of forests on climate, are certainly valuable in that direction. They were made by M. Mathieu, Professor in the School of Forestry, at Nancy, and were reported by him to the Agricultural Congress, at Nancy, in 1869. They include the first eight months of each of the years named, and were made with reference to each of the following points:

1st. Does the wooded condition of a country exercise an influence upon the amount of rain it receives?

The answer to this question was attempted by taking two stations at equal height above the sea, but separated between fifteen and twenty miles, the one situated in a wooded and the other in a cultivated country, and observing the rainfall. The result, reduced to inches, was that at the agricul-

tural station the rainfall for the three seasons was 82.02 inches, and at the forest station 93.13 inches; difference in favor of the forest station, 11.11 inches.

2d. Does the covert of the forest, by intercepting the rain falling from the atmosphere, diminish to a considerable extent the amount of rain that reached the ground?

This was answered by placing rain-gauges beneath the trees, and in the open ground close at hand, and comparing results, which were as follows:

In open ground,	92.09 inches.
Under the trees,	87.74 "
Excess in open ground,	4.35 "

This shows that while some of the rainfall in the forest does not reach the ground, still by comparing what did reach it with the result at the agricultural station, we have 87.74 inches for the rainfall under the trees, and 82.02 inches for the fall at the agricultural station, an excess of 5.72 inches in the forest.

3d. What is the effect of a wooded country on the conservation of the moisture received by the soil?

The answer was sought from a comparison of the evaporation from two equal vessels, one placed in the forest, the other in the open ground. Evaporation went on five times as rapidly, taking the whole year into consideration, in the open ground as in the forest, ranging from three to six times between April and July; 85 per cent. of the rain falling from the open field evaporated, whilst only 22 per cent. of that falling in the forest was lost.

4th. What is the influence of forests upon temperature?

The experiments in this direction had been conducted but a short time, but go to show that the mean annual temperature in the woods is lower than in the open country, and that the difference is least in winter and greatest in summer. In 1868 the mean temperature of the forest was lower than that of the open fields by 4° 35' in the morning, and 9° 33' at night, in July; which difference fell in December to 0° 48' in the morning, and 0° 94' at night. Again, the average variation in temperature was much greater in the open country than under cover of the forest between day and night. It ranged from 0° 05' to 5° 57' in the open air, but only from 0° 04' to 1° 22' in the forest.

Hay Caps.

During the season, caps for hay and grain have been extensively used at the Michigan Agricultural College. Dr. Miles, says that they have much more than paid for themselves and all the trouble of putting on. They are made of heavy cotton cloth, with a string to each corner, to fasten to a stake or a small weight. On many farms they can be put on by girls and boys.